DOCUMENT RESUME

HE 002 704 ED 057 732

Forman, Joseph C., Comp. AUTHOR

Parking on College and University Campuses. An TITLE

Annotated Bibliography.

New York State Education Dept., Albany. Bureau of INSTITUTION

Occupational Education Research.

[71] PUB DATE

NOTE 25p.

New York State ERIC Service, Room 468 EBA, State AVAILABLE FROM

Education Department, Albany, New York 12224 (MF only

- Free)

MF-\$0.65 HC-\$3.29 EDRS PRICE

Annotated Bibliographies; *Higher Education; *Motor Vehicles; *Parking Areas; *Parking Controls; Parking DESCRIPTORS

Facilities: *Traffic Circulation

ABSTRACT

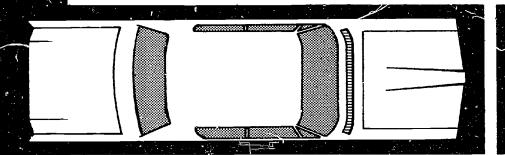
This bibliography is a compilation of case studies, dissertations, minutes of meetings and special project reports having to do with the increasing problem of college campus parking. (HS)



PARKING ON

COLLEGE AND

UNIVERSITY CAMPUSES



AN ANNOTATED BIBLIOGRAPHY

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGINATING IT, POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

The University of the State of New York

THE STATE EDUCATION DEPARTMENT

Higher Education Facilities Comprehensive Planning Program

Albany, New York 12210



THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of the University (with years when terms expire)

Coordinator, Higher Education Facilities Comprehensive Planning Odino A. Martinetti						
	Willia	m S. Fuller				
Assistant Commissioner for Higher Education Planning Robert H. McCambridge Director, Higher Education Facilities Planning						
						Deputy Commissioner for Higher Education T. Edward Hollander
Executive Deputy Commissioner of Education Gordon M. Ambach						
President of the University and Commissioner of Education E_{W} B. Nyquist						
	1981	Theodore M. Black, A.B., Litt.DSands Point				
	1983	Harold E. Newcomb, B.A				
	1982	Stephen K. Bailey, A.B., B.A., M.A., Ph.D., LL.DSyracuse				
	1986	Kenneth B. Clark, A.B., M.S., Ph.D., Litt.D				
	1980	Max J. Rubin, LL.B., L.H.D				
	1979	Francis W. McGinley, B.S., LL.B., LL.D				
•	1976	Mrs. Helen B. Power, A.B., Litt.D., L.H.D., LL.DRochester				
-	1974	Joseph C. Indelicato, M.DBrooklyn				
	1977	Joseph T. King, LL.BQueens				
	1975	Edward M. M. Warburg, B.S., L.H.DNew York				
	1972	Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S., H.H.DPurchase				
	1973	Charles W. Millard, Jr., A.B., LL.D., L.H.DBuffalo				
	1978	Alexander J. Allan, Jr., LL.D., Litt.DTroy				
		Everett J. Penny, B.C.S., D.C.S. Vice ChancellorWhite Plains				
	1985	ChancellorNew York				
	1984	Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D., D.C.L.,				



FOREWORD

With an increasing number of automobiles on campus, many colleges face a severe parking shortage. The institutions collectively may be described as suffering from "the chronic parking condition"--specifically, insufficient numbers of parking spaces, and campus parking areas becoming unduly congested causing impeded vehicular and pedestrian traffic flow. This condition may be considered to exist when campus mobility is significantly impaired.

This compilation does not profess to be an all inclusive document on the subject of college campus parking. It is, however, cross-sectional in terms of the type of materials and the time period encompassed. Case studies, dissertations, books, minutes of meetings, special project reports, etc. are included for a span of almost 30 years.

Entries are listed alphabetically, by year, with a crossreferenced institutional index.

This bibliography was developed in its entirety by Joseph

C. Forman. We hope it proves to be of some value to those campus

planners who are "seeking a cure for the common car."



<u>Acknowledgments</u>

Some of the entries included in this report were derived wholly or in part from works already in print. These works included:

- (1) "Parking-Selected References 1968" No. 50 and "Parking-Selected References 1966" No. 44, published by the Highway Research Bureau, Washington, D.C. 20418.
- (2) "Campus Parking Bibliography" 1962 (OE 51004) and a 1965 supplement by E. Eugene Higgins and Dorothy Jones of the U.S. Office of Education's Facilities Branch.
- (3) "An Annotated Bibliography on University Planning and Development," December 1968 by Kermit C. Parsons and Jon T. Lang or Cornell University.

Campus Parking

Selected References

70-1 Blurton, Michael. "Cars and Buses Get Along Together in Integrated Program." College and University Business. Vol. 49, No. 6 (December 1970). pp. 53-54.

Kent University's approach to student mobility makes maximum use of cooperation between two indispensable modes of transportation in a coordinated program.

70-2 "Buses Take the Load Off Campus Traffic." College and University Business. Vol. 49, No. 6 (December 1970). pp. 54-56.

A summary of tactics for helping students cover ground on expanding campuses.

70-3 "Cars on the Campus." <u>College Management</u>. Vol. 5 (April 1970). pp. 10-13.

Where will all those cars park? This problem and several current solutions are discussed.

70-4 "Cars Under Campus." <u>College Management</u>. Vol. 5 (April 1970). pp. 14-15.

The University of Akron is burying multilevel garages below buildings in spite of the expense. A building portfolio describes the facilities.

70-5 "The Great Space Race." <u>College and University Business</u>. Vol. 49, No. 5 (November 1970). pp. 47-56.

A compilation of four pertinent articles on campus parking:

(1) Pulling Out of a Parking Jam - National roundup of parking dilemmas and solutions shows how colleges are shifting into action. (2) Better Your Lot - A well-designed parking lot can result in maximum use of space as well as greater traffic efficiency. (3) Keeping Cars in Their Place - Auto automation helps car-clogged campuses find a cure for the common car. (4) Where to Turn for Parking Know-How - A compendium of literature and manufacturers.



70-6 "Industries Keep Campuses on the Move." <u>College and University</u>
Business. Vol. 49, No. 6 (December 1970). pp. 51-52.

An electrically powered bus is only one of the new "people movers" described in this roundup of transportation products designed to keep students mobile without contributing to noise and air pollution.

70-7 McLewin, J. W. A Macro-Analysis of University Parking. M.Sc.
Thesis. (August 1970). Queens University, Kingston, Ontario.
125 pp. Appendixes.

Designed to assist the transportation planner in analyzing and finding solutions to the parking problems on North American campuses. The nature of the information is such that it may be used for both the conceptual and functional planning stages of design.

70-8 Prytula, George. "Fixed-Rail Transit Is Headed for the Campus."

<u>College</u> and <u>University</u> <u>Business</u>. Vol. 49, No. 6 (December 1970). pp. 45-50.

Alternatives to automobiles on college campuses may be more than an administrator's unattainable dream if current research is to be taken seriously. From automated fixed-rail systems to computer-controlled buses, industry is doing its share in the great race for space.

- 70-9 Wearstler, D. A. "How Traffic Tickets Can Werk." American School and University. Vol. 42, No. 27 (July 1970).
- 69-1 Eugene D. Sternberg and Associates. Master Plan: Arapahoe

 Junier College. Littleton, Colorado. (n.d. circa 1969). 121 pp.

A comprehensive review of the development of the master plan for a junior college with a projected enrollment of 2,000 full-time students is presented. Included among the secondary project phases described are: (1) site planning and engineering, (2) circulation data, (3) architectural programing and development, (4) statistical data and project assessment.

- Found, M. Y. Campus Transportation Planning: A Case Study of the
 Lafayette Campus of Purdue University, Joint Highway Research
 Project. (February 1969). Purdue University and Indiana
 Highway Commission.
- 69-3 McConochie, William R. <u>Design of Parking Lots and Garages</u>.

 University of Wisconsin's Engineering Institute. (February 1969). Madison, Wisconsin. 11 pp.

Layout, control, and sign posting in the design of parking facilities is discussed, emphasizing self-parking and automated control. Traffic control factors are related to

the direction and placement of cars and the collection of fees. The appendix includes layouts of parking facilities.

69-4 Todd/Parkorny, Architects and Planners. Master Plan: 1969-1975.

Herbert H. Lehman College (prepared for the City University of New York). (March 1969). Bronx, New York.

Sections 4.60 and 4.61 refer to parking conditions in and about campus.

69-5 Ward, Richard F. and Theodore E. Kurz. The Commuting Student.
Geology Department, Wayne State University. (1969). Detroit,
Michigan. 39 pp.

A study of Wayne State University facilities which demonstrates a great need for changes in American colleges to accommodate the student who lives off-campus.

69-6 Warnecke, John Carl, F.A.I.A. Architects and Planning Consultants.

Master Plan: 1969-1975 The City College (prepared for the City University of New York). (July 1969). New York, New York.

An appendix entitled "Parking Study" is available but with limited distribution.

68-1 Adamson, Clay W. "How a State University System Plans its New Campus Landscape." <u>Landscape Architecture</u>. (October 1968). pp. 36-40.

When plans now completed are carried out in Georgia for all the University system's 27 institutions, congestion formerly caused by vehicles on campus streets will become only a memory. Enlarged and additional parking facilities and perimeter roads are the key to the change in emphasis that will reduce car traffic on campus and give institution grounds back to the pedestrians who study and teach there.

68-2 Alan M. Voorhees and Associates, Inc. <u>Traffic and Parking Study-Vanderbilt University</u>. (February 1968).

This was a study of present parking supply and demand on the Vanderbilt University campus and the effect of various street changes on the traffic flow within the university area. Future (1985) parking needs were established, and a combination of parking structures and surface lots were seized and located so as to meet the parking demand. Improvements to the street system were recommended to increase capacity to the level needed in 1985.

68-3 "Appearance Belies Vast Dimensions of Newly Completed UCLA Parking Structure." <u>Parking</u> (National Parking Association). (Spring 1968). pp. 22-23.



The new Gayley-Strathmore parking structure at the University of California at Los Angeles, contains 850,000 gross square feet of parking (2,800 cars), but its low silhouette, rooftop plants, and proximity to a football practice field mask its large size. Cost of the building was \$4.4 million. A two-lane bridge ramp and a tunnel beneath the football field provide access to all levels of the building. Construction is of precast pretensioned concrete.

- Barton-Aschman Associates, Inc. <u>Campus Traffic and Parking Planning Study: Phase I.</u> University of Chicago. (October 1968). Chicago, Illinois.
- 68-5 D'Amico, Louis A. and William D. Brooks. <u>The Special Campus:</u>

 <u>A Planning Scheme</u>. School of Education, Indiana University.
 (1968). Bloomington, Indiana.

The introduction discusses campus planning in general. The book contains a facilities bibliography covering the years 1950 to 1967. Parking considerations on campus are a specific topic.

68-6 Gan, R. C. H. "Parking in the University Campus." <u>Institution</u>
of <u>Highway Engineers</u> <u>Journal</u>. (September 1968). Great
Britain. pp. 41-46.

This article is based on a parking survey report for the University of Malaya. Low vehicle ownership and no acute shortage of car spaces, but absence of shade or shelter in some of the lots resulted in low usage. Scooter spaces could not meet peak hour demand. Discussed are forms of control on student vehicle usage and other local influences that will have to be taken into consideration. References are also included.

68-7 An Illustrative Hypothetical Example of Cost-Benefit Analysis:

(Problem No. 2) The Parking Problem. The University of California at Berkeley. (1968). Berkeley, California. 25 pp.

This document presents an application of cost-benefit analysis to a hypothetical university parking problem. After discussing cost-benefit analysis in general, the document applies this technique to hypothetical data in light of a checklist for general cost-benefit procedure. The checklist includes the following: (1) examine and quantify the objective; (2) array all alternatives; (3) develop total costs and analyze alternatives in detail; (4) describe and estimate spillover effects, uncertainties, and unquantifiables; and (5) in light of cost, benefits, and spillover effects, choose the most attractive alternative. Tables and graphs are used to illustrate the analytical process.



68-8 Kinbar, Sheldon A. <u>Feasibility Study for a Transit System</u>

<u>Between University Buildings and Parking Facilities.</u> Northwestern University. (1968). Evanston, Illinois. 65 pp.

Study made for the University of Wisconsin Parkside campus, a completely new campus in the Kenosha-Racine area designed to accommodate 25,000 students by 1990. Included in the design were parking lots separated from the campus by land-scaped areas. A transit system was needed to connect the parking lots with the campus. Various transit systems were investigated and three--rail, buses on private roadway, Westinghouse Transit Expressway--were chosen for further study. A computer analysis based on cost and level of service was used to compare the three systems. It was concluded that the rail transit system offered a higher level of service at a lower cost but that the flexibility afforded by the bus system made it a more logical initial choice.

68-9 Marconi, William. "A Study of Parking Needs at Two Urban Campuses." Traffic Engineering. (July 1968). pp. 50-51.

Studies made at the University of San Francisco and San Francisco State College located in San Francisco show that one parking space is needed for every four students.

68-10 Pendakur, V. Setty. "Access, Parking, and Cost Criteria for Urban Universities." <u>Traffic Quarterly</u>. (July 1968). pp. 359-387.

The private automobile has had more impact on the university campus than on the central business districts of cities. Underestimated has been the mushrooming growth in the use of cars by the students themselves. The essential problems in meeting parking demand, aside from actual provision of adequate space, are reluctance to convert green campus into parking lot, objection of adjacent homeowners to excessive use of streets for parking, and disinclination on the part of students to pay for parking.

- Pinnell, Carles and Mechad Wacholder. Guidelines for Planning
 in Colleges and Universities. Volume III Physical Plant
 Planning, Land Use and Traffic. Coordinating Board, Texas College
 and University System. (1968). Austin, Texas. 148 pp.
- 68-12 Rich, Richard C. "Colleges Build Up--And Down--In Search for Parking Space." College and University Business. (June 1968). pp. 48-51.

A survey study of 27 colleges and universities reveals campus parking problems and some steps taken to correct them.

HARRING HARRY MAN THE LOCK OF THE PARTY OF T



Victor Gruen Associates. Report on Master Planning for the California State College at Bakersfield. (September 1968).

Los Angeles, California. 255 pp.

Academic requirements and criteria are discussed, as well as physical planning response, incremental growth to a campus for 12,000 full-time equivalent students, environmental character, technical requirements, and the estimated capital costs for California State College at Bakersfield. Appendix A contains an analysis of the traffic and parking requirements for the 12,000 FTE campus.

67-1 Ad Hoc Committee on Circulation and Parking. Long-Range Goals and Immediate Programs. (September 1967). Minneapolis, Minnesota. 18 pp.

This is a report from the committee to the president of the University of Minnesota.

- 67-2 "Architecture Gives Campus Unity of a Single Building." College and University Business. Vol. 42 (February 1967). pp. 72-75.
- 67-3 Caudill, Rowlett and Scott. <u>University of Miami Comprehensive Campus Plan</u>. (1967). Houston, Texas.
- 67-4 Caudill, Rowlett and Scott. William Rainey Harper College Comprehensive Campus Plan. (1967). Houston, Texas.
- DeLeuw, Cather and Company. Geometric Designs and Preliminary

 Design Criteria for Alternative Parking Structures at Six

 Designated Locations. Physical Plant Department. ChampaignUrbana Campus. University of Illinois. (1967). Chicago,

 Illinois. 65 pp.

A report on preliminary design studies for parking structures on six alternative sites in the vicinity of the Ohio University of Illinois campus at Champaign-Urbana.

DeLeuw, Cather and Company. <u>Town of Normal-Illinois State University Traffic and Parking Study</u>. (1967). Chicago, Illinois. 66 pp. Maps.

A report presenting a traffic and parking plan for the business district of the town of Normal and the Illinois State University campus.

67-7 Interim Report for the Ad Hoc Committee on Circulation and Parking. (February 1967). Chicago, Illinois. 66 pp.



67-8 "Parking Is on the Rise at PSC." American School and University. Vol. 39, No. 59 (May 1967). 2 pp.

Automobile parking structures are discussed in relation to planning urban universities. Answers are presented to typical questions concerning campus parking facilities and policies; many of the considerations are supplemental with information based on Portland State College's parking facilities.

- 67-9 "Parking Lots: Free or Fee." <u>American School Building Journal</u>. (August 1967).
- 67-10 "Science Center Built on Parking Structure." College Management. Vol. 2, No. 5 (May 1967). p. 50.

Akron's problem was space. It was solved by building a science building on top of a parking lot.

67-11 The University of Michigan Campus Identification Signs. Michigan University. (1967). Ann Arbor, Michigan. 31 pp.

Specific information, identification, and direction to and within the Michigan campus as factors determining a campus sign system are discussed in terms of (1) needs requiring an identification sign system; (2) recommendations for initiating a comprehensive sign system for the university; and (3) application procedures as they relate to streets, walkways, buildings, and places. Sign categories include direction and identification information. Supporting graphic material includes suggested symbols, colors, sign configurations, and construction details.

66-1 Barr, William G. "Campus Parking." <u>Parking</u> (National Parking Association). (Summer 1966). pp. 24-25.

Percentage of automobile usage has increased on the campus at a much greater rate than in any central business district.

- 66-2 Caudill, Rowlett and Scott. <u>Bowling Green State University Comprehensive Campus Plan</u>. (1966). Houston, Texas.
- 66-3 Caudill, Rowlett and Scott. <u>Campus Planning Study for Daytona</u>
 <u>Beach Junior College</u>. (November 1966). Houston, Texas.

 46 pp.

Major considerations and findings are presented in regard to the updating of a long-range campus plan for the development of buildings, parking areas, drives, and sidewalks at Daytona Beach Junior College. After consideration of the background and program of the college, a site analysis is presented. Plans and recommendations are offered regarding land use, campus development, and utilities. The appendix includes many pages of supplementary data concerning the existing campus development.

66-4 Caudill, Rowlett and Scott. <u>Duke University: Phase II:</u>
Comprehensive Campus Plan. (May 1966). Houston, Texas.
96 pp.

This second phase of the Duke University planning study, the development process, includes the refinement and focusing of its educational program and future space requirements. Projected enrollment, faculty, and parking requirements are tabulated in the appendix.

66-5 Telfer, I. D. North Central Campus - State Street: Origin and Destination Traffic Survey. Michigan University. (September 1966). Ann Arbor, Michigan. 31 pp.

Vehicular and pedestrian traffic in and about the North Central Campus of the University of Michigan, Ann Arbor, was surveyed in November of 1964 to obtain the traffic and parking data necessary to establish the basic characteristics of vehicular movement within the survey area. These traffic circulation facts were intended to be a basis for recommendations to improve area traffic circulation. Appendixes include sample data collection instruments, trip tables, term definitions, and data summaries.

DeLeuw, Cather and Company. Southern Illinois University, Carbondale Campus: Traffic and Parking Study. (1965). Chicago, Illinois. 55 pp. Maps.

An analysis of parking and traffic considerations leading to the proposal of financing 3,000 new parking spaces by the issuance, in successive stages, of approximately \$2,150,000 of revenue bonds to be serviced by the net revenues of the parking program.

- 65-2 Leipold, L. E. "Students Cars and the Law." Clearing House.
 Vol. 39 (January, 1965). pp. 271-273.
- Purdue University Road School, Lafayette, Ind. <u>Proceedings</u>, Engineering Extension Series, No. 119. (1965). Lafayette, Indiana. 280 pp.

Design of Offstreet Parking Facilities, by George W. Howie, pp. 42-45; O peration of Offstreet and Onstreet Parking Facilities, by William J. Fehribach, pp. 46-55.

Roth, G. J. Parking Space for Cars: Assessing the Demand.
University of Cambridge, Department of Applied Economics,
Occasional Papers No. 5. Cambridge University Press. (1965).
New York, New York. 81 pp.

Introduction, the need for parking surveys; review of the main survey problems; brief description of the parking surveys; selected results; lessons for future surveys. Appendix A:



Statistical problems of a survey based on cars parked in an area, by W. B. Reddaway. Appendix B: The questionnaires.

65-5 Telfer, 1. D. North Campus Planning Conference. University of Michigan. (January 1965). 27 pp.

A January 1965 conference was held to update a 1951 North Campus Study. The result was a unified plan of the main elements, including: (1) land use, both present and future, (2) community development and land use, (3) roads and auto circulation, (4) recreation and open space, (5) pedestrian and bicycle pathways, (6) bus routings, (7) parking, and (8) care and peripheral functions. The appendixes list further studies to be undertaken, participants in the conference, and references.

- 64-1 "Cars on Campus." American Alumni Commentary. 12th Issue.

 Agrerican Alumni Council. (September 1964). Washington, D.C.
 p, 101.
- 64-2 Caudill, Rowlett and Scott. Monroe Community College Comprehensive Campus Plan. (1964). Houston, Texas.
- 64-3 "The Community Junior College Site." The Florida Architect. (1964).
 Coral Gables, Florida. 3 pp.

Criterion for site selection and planning as presented in the form of conceptual suggestions. Selection factors discussed include: (1) site location, (2) accessibility, (3) area requirements, (4) topological and geological conditions, and (5) available facilities and property speculation.

- 64-4 "Do Cycles Create More Problems Than They Solve." College and University Business. Vol. 37, No. 5 (November 1964). p. 4.
- 64-5 "Princeton Bans Cars on Campus." <u>College and University Business.</u>
 Vol. 37, No. 4 (October 1964). p.88.
- 64-6 Schwartz, Arthur. <u>Transportation To and From the Campus</u>. (A Report to the President and the Executive Planning Committee on the Physical Plant). Pennsylvania University. (March, 1964). Philadelphia, Pennsylvania. 115 pp.

A study dealing with the means of transportation required and used by students, faculty, staff, and other employees of the $U_{\mbox{niversity}}$ of Pennsylvania in their travel to and from campus.

64-7 Scott, William L. "How to Control Student Cars on Campus--Indiana Survey Indicates Current Practice." College and University Business. Vol. 36, No. 1 (January 1964). pp. 41-42.



"Site Planning and Development." The Florida Architect. Vol. 14, No. 6 (1964). Coral Gables, Florida. 3 pp.

Describes the characteristics of a community's rapid growth preceding the analysis of the program requirements of a junior college project. Program development description emphasizes (1) site acquisition and vehicular access planning, (2) site circulation, (3) functional building-site relationships, and (4) facility development phase programing.

63-1 Alexander, Robert G., F.A.I.A. and Associates. Long-Range

Development Plan. University of California, San Diego.

(October 1963). 53 pp. Maps.

An excellent plan, conceptually and architecturally; very handsomely presented.

- Austin, Smith, and Associates and Harland Bartholomew and Associates. University of Hawaii Manoa Campus, Traffic and Parking Study: Part I Parking. (1963). Honolulu, Hawaii.
- 63-3 Campus Planning Committee. Long-Range Development Plan. University of California, Santa Barbara. (November 1963). Santa Barbara, California. 43 pp.

Consists of two parts. Part I "background for long-range development" includes the listing of the plan, a description of the campus and community and the academic plan. Part II or the "long-range development plan" describes the basic principles which include design philosophy, academic and research requirements, activity organization, quadrangles, building density, circulation and parking, residential facilities, landscape development, and community relatedness.

- Delamater, James B. "Parking Facilities." The Design of Outdoor
 Physical Education Facilities for Colleges and Schools. Bureau
 of Publications, Teachers College, Columbia University. (1963).
 New York, New York. p. 110.
- 63-5 Harland Bartholomew and Associates. Long-Range Traffic and Parking
 Plan for the University of Mississippi. (1963). Memphis,
 Tennessee.
- 63-6 Long-Range Development Plan, University of California at Irvine.

 Campus Planning Committee. (June 1963). Irvine, California.

 89 pp.

The long-range development plan for the University of California at Irvine is discussed. Ultimate enrollment planned for is 27,500. Specific concepts discussed and illustrated include land use, parking, open space, traffic circulation, utility systems, and the surrounding community.

63-7 <u>Long-Range Development Plan, University of California at Santa</u>

<u>Cruz. Campus Planning Committee.</u> (September 1963). Santa

Cruz, California. 56 pp.

Effort is made to utilize the natural surroundings and topology of the site. Specific areas discussed include housing, parking, space allocation, landscaping, architecture, engineering, and utilities. The Santa Cruz Development Plan translates the academic plan into terms of physical reality and establishes guidelines for continuing campus development. Fifteen to twenty residential colleges and 10 professional schools are planned to accommodate an ultimate population of 27,500 students.

63-8 Matt, Harold Lewis. Site: Man-Made Objects. Performance Criteria Monographs. State University Construction Fund. (1963). Albany, New York. 128 pp.

Enlightening treatment of the subjects of campus "street furniture," lighting, visual communications (signs), traffic control, visual and emergency communication set in the context of visual perception.

63-9 "Planning for Campus Parking." American Society of Planning
Officials Planning Advisory Service Report No. 173. (1963).
Chicago, Illinois. 3 pp.

This survey "presents some of the factors related to planning campus parking areas, such as availability and location of student housing, the adequacy of mass transportation facilities, general policies regarding use of vehicles, and the city's position concerning on-street parking in the immediate neighborhood."

- 63-10 Schwab, George. "What a Way to Run a Railroad! No Fare, No Track--Just Plenty of Customers and Convenience." College and University Business. Vol. 35, No. 6 (November 1963). pp. 64-65.
- 62-1 "Acres of Grass--55 of Them--Require Lots of Care on Average College Campus." College and University Business. Vol. 33, No. 4 (October 1962). p. 64.
- 62-2 Harland Bartholomew and Associates. Long-Range Parking Plan, The University of Illinois, condensed. (1962). Memphis, Tennessee. 22 pp.

An excellent and very thorough analysis of campus parking.

Harland Bartholomew and Associates. Technical Report: Long-Range Parking Plan for the University of Illinois. Memphis, Tennessee. 36 pp. (Out of print).



-11-

- 62-4 Hoogesteger, H. H. "Parking Stickers." <u>College and University</u>
 <u>Business</u>. Vol. 32, No. 1 (January 1962). p. 6.
- 62-5 Jakad, William. "Committee Controls Traffic Step-by-Step." College and University Business. Vol. 32, No. 6 (June 1962). pp. 47-52.
- 62-6 Netsch, Walter A., Jr. "Master-Planning the College or University."

 <u>Tri-Quarterly</u>. Vol. 4, No. 3 (Spring 1962). pp. 7, 8, 10.
- 62-7 Parking Programs for Universities. Wisconsin University Facilities Research Center. (March 1962). Madison, Wisconsin. 29 pp.
- 62-8 "Parking and Vehicular." Long-Range Building Program for Indiana
 State College. Education Research Services, Inc. (August 1962).

 New York, New York. pp. 61-65.
- Suber, L. T. "Bicycles Solve Some Traffic Problems--Create Others."

 College and University Business. Vol. 32, No. 6 (June 1962).

 pp. 65-66.
- 62-10 Suber, Terry. "Parking, A Cyclopean Problem." NAPPA Newsletter. Vol. 9, No. 7 (February 1962). pp. 22-27.
- 61-1 Alexander, Robert A. "They Built a Union for Medics." College and University Business. Vol. 31, No. 6 (December 1961). pp. 42-44.
- 61-2 Barton-Aschman Associates, Inc. <u>Uptown Campus Plan of DePaul University</u>. (1961). Evanston, Illinois. 22 pp. Maps.

A development plan concerned with determining areas for the expansion of the University and with creating a visual identity for the campus.

- 61-3 <u>Campus Planning Bulletin No. 9</u>. Ohio State Office of Campus Planning. (November 1961). Columbus, Ohio. pp. 17-18.
- 61-4 Caudill, Rowlett and Scott. Phase II. The Recommended Plan. (October 1961). Houston, Texas. T49 pp.

The decided upon master plan for the development of Ohio State University. All planning aspects of the future growth pertinent to O. S. U. are treated. An appendix includes a bibliography of documents used in the study.

61-5 Caudill, Rowlett and Scott. <u>Campus Planning for Ohio State</u>

<u>University</u>. <u>Phase II--Technical Supplement</u>. (October 1961).

Houston, Texas. 2 pp.

Tables of statistical information and explanatory notes pertinent to the separately bound campus plan for Ohio State University. This supplement is designed to aid in the dayto-day review and implementation of the master plan.

- DeMonte, L. A. "Aspects of Campus Planning." In Minutes of the Forty-Eighth Annual Meeting. National Association of Physical Plant Administrators of Universities and Colleges. Oregon State University. (July 3-7, 1961). Corvallis, Oregon. pp. 29, 34-35.
- 61-7 Parking Programs for Universities. University Facilities Research Center. (1961). Madison, Wisconsin. 28 pp.

A monograph concerned with surveying current parking practices on university campuses, and with deriving planning and policy criteria in this field. Largely the work of DeLeuw, Cather and Company, Engineers of Chicago.

- 61-8 "Parking Regulations." <u>College and University Business</u>. Vol. 30, No. 5 (May 1961). p. 4.
- 61-9 A Proposed Off-Street Parking Plan. University of Pennsylvania Planning Office. (1961). Philadelphia, Pennsylvania.
- 61-10 Sheeder, F. Thomas. "How to Control Your Parking Situation for Better Utilization and a Safer Campus." <u>College and University Business</u>. Vol. 31, No. 4 (October 1961). pp. 49-51.
- 61-11 Sweeney, Larry (chairman). "Experience Exchange VI Cars on Campus." In Minutes of the Forty-Eighth Annual Meeting.
 National Association of Physical Plant Administrators of Universities and Colleges. Oregon State University. (July 3-7, 1961). Corvallis, Oregon. pp. 218-219.
- 61-12 Walshe, R. C. "We Solved the Parking Problem on Our Campus."

 <u>College and University Business</u>. Vol. 30, No. 4 (April 1961).

 pp. 62-64.
- 61-13 Weinstock, Ruth. "The Parking Problem." In <u>Space and Dollars</u>:

 <u>An Urban University Expands</u>. Educational Facilities Laboratories,
 Inc. (1961). New York, New York. pp. 26-27.
- Alonzo J. Harriman, Inc. <u>A Growing University 1960-1970</u>: <u>A Long-Range Plan of Growth for the Campus of the University of Maine at Orono</u>. (1960). Auburn, Maine. 28 pp. Maps.

Includes student enrollment projections, and a series of individual studies of expansion up to 1970 including housing, academic, recreation, parking, and services; and a short discussion of expansion potentials beyond 1970.

Berry, Chester Arthur. "Parking Space." In <u>Planning a College</u>

<u>Union Building</u>. Teachers College, Columbia University. (1960).

New York, New York. pp. 167-169.



60-3 Caudill, Rowlett and Scott. <u>Brazos Area Plan</u>: <u>Campus Circulation</u>
<u>Plan</u>. Brazos Area Planning Corporation. (1960). College Station,
Texas.

Origin and destination, vehicle volume studies growth trend analysis, and a circulation and parking plan for the Agricultural and Mechanical College of Texas--very thorough.

60-4 Caudill, Rowlett and Scott. <u>Campus Planning Report for Mesa College</u>. (1960). Houston, Texas.

A summary of existing and anticipated conditions affecting the growth of Mesa College is presented. Analysis of projected growth and space requirements and an evaluation of recommendations for a long-range plan are included.

60-5 <u>Centralized Parking Administration</u>. University Circle Development Foundation. (1960). Cleveland, Ohio. 29 pp. Mimeo.

A memorandum on centralized parking control and administration sent to Western Reserve University, Case Institute of Technology, and the University Hospitals of Cleveland.

- 60-6 Master Plan Study. Clark University Development Council. Physical Plant Development Subcommittee. (November 1960). Worcester, Massachusetts. pp. 14-15, 23-24.
- 60-7 Hills, John E. "Trouble on Wheels." <u>College</u> and <u>University Business</u>. Vol. 29, No. 1 (July 1960). pp. 38-39.
- 60-8 Houston, Robert. "Controlling Grainds and Traffic by Two-Way Radio."

 College and University Business. Vol. 29, No. 2 (August 1960).

 p. 31.
- 60-9 Lautner, Harold W. "Building Traffic Safety into a Campus." <u>College</u>
 and <u>University Business</u>. Vol. 29, No. 1 (July 1960). pp. 27-29.

A discussion of planning circulation and land use with respect to traffic safety.

· 1985年 1

- 60-10 Seltzer, G. L. "Automobile Invasion." Overview. Vol. 1, No. 44 (August 1960).
- 60-11 Warner, Burns, Toan, Lunde. <u>Permanent Campus Facilities</u> <u>Corning Community College</u>. (1960). New York, New York. 39 pp.
- 60-12 Wood, Frederic C. "The Parking Problem." In <u>Efficient Operation</u>
 and <u>Economical Expansion of Undergraduate Teaching Facilities of Urban Universities</u>. Drexel Institute. (May 1960). Philadelphia, Pennsylvania. pp. 10-11, 15-16.
- Barton, George W. and Frederick T. Aschman. <u>Area Circulation Plan</u>
 for the Evanston Campus of Northwestern University. (1959). Evanston,
 Illinois. 18 pp. Maps.



59-2 Blair Associates. Rhode Island College Campus Development Plan 1960-1980. (1959). Providence, Rhode Island. 28 pp. Maps.

An increase in enrollment from 1,000 in 1960 to 4,000 in 1980 is forecast with 15 percent of the students to be housed on campus and provision made for 3,300 parking spaces. This is a detailed development plan, clearly presented with statistical information contained in a separate booklet.

- Burstein, Harvey. "On-Campus Parking Means Registration Fees and Some Type of Control." College and University Business. Vol. 27, No. 1 (July 1959). pp. 39-41.
- 59-4 Colvert, C. C. Educational Planning for Carver College on the New Campus. Board of Trustees, Charlotte Community College System. (September 1959). Charlotte, North Carolina. 53 pp.
- 59-5 Harland Bartholomew and Associates. <u>Parking on the Queens-Bishop Campus--Rutgers University</u>, <u>New Brunswick</u>, <u>New Jersey</u>. (1959). St. Louis, Missouri. 38 pp. plus appendixes.
- 59-6 "Parking Area Lighting." In <u>IES Lighting Handbook</u>, 3d edition. (1959). New York, New York. Chapter 13, pp. 14-15.
- 59-7 Lakimer, R. M. and Caudill, Rowlett and Scott. <u>Campus Planning</u>
 <u>for Ohio State University: Phase I Alternative Basic Schemes.</u>
 (1959). Houston, Texas.

This document identifies some of the problems encountered in developing a master plan for a state university, but with a choice of two alternative plans--centralization and decentralization. The parking problems to be encountered for each alternative are discussed as well as many of the other planning problems. A bibliography of the Ohio State University campus studies and projected campus graphs are included.

- 58-1 Baker, Geoffrey H. and Bruno Funaro. <u>Parking</u>. Reinhold Publishing Corporation. (1958). New York, New York. 202 pp.
- 58-2 "The College Heights Campus Project." In Educational Specifications for the College Heights Campus. College of San Mateo. (1958).

 San Mateo, California. pp. 7-8, 14.
- 58-3 Csanzi, L. H. "Parking Practice on College Campuses in the United States." The Iowa State College Bulletin (No. 181). Vol. 57, No. 18 (October 1958). 19 pp.
- Middlebrook, William T. How to Estimate the Building Needs of a College or University. The University of Minnesota Press. (1958). Minneapolis, Minnesota. pp. 11, 65.



National Committee on Urban Transportation, Manual 3D. <u>Conducting</u>
<u>a Comprehensive Parking Study</u>. Public Administration Service.

(1958). Chicago, Illinois.

It is because parking usually reserves only sporadic low-echelon attention that it remains a problem on many campuses. This report brings together a package of practical information on how colleges are managing their parking problems, recent technological development, and a compendium of products, people, and publications to assist in better managing.

- 58-6 "Number One College Problem: Parking on Campus." <u>Nation</u>. Vol. 187 (November 1958). pp. 371-372.
- 58-7 Simpson and Curtin. <u>Traffic</u> <u>and Transportation in Philadelphia's</u> <u>University Area</u>. (1958). Philadelphia, Pennsylvania.

A report prepared for the University of Pennsylvania and Drexel Institute of Technology on existing and projected traffic patterns and the effect of city expressways and other proposed street changes on campus circulation.

Adams, Howard and Greely. <u>University Circle</u>: <u>Technical Report on a General Plan for the Future Development of the Area</u>. (1957). Cambridge, Massachusetts. 89 pp. Maps.

A development plan for 34 institutions including Western Reserve University, Case Institute of Technology, and University Hospitals in Cleveland. Up to 1957, this is one of the very comprehensive institutional plans.

57-2 Caudill, Rowlett and Scott. An Approach to College Design. (1957).
Bryan, Texas.

Background research, analyses, and solution for the development of Oklahoma Christian College in Oklahoma City, Oklahoma.

- 57-3 Hannum, Paul C. "The Cars that Come to the Campus." <u>College and University Business</u>. Vol. 22, No. 2 (February 1957). pp. 33-36.
- 57-4 "Parking Facilities." <u>Journal of the American Institute of Architects</u>. Vol. 28, No. 5 (September 1957). pp. 311-322.
- 57-5 "Parking Facilities." <u>Journal of the American Institute of Architects.</u>
 Vol. 28, No. 6 (October 1957). Pp. 367-374.
- 57-6 Shurcliff, Shurcliff and Merill. <u>Master Plan for the University of</u>
 Massachusetts. (1957). Boston, Massachusetts.

A detailed master plan for the university with an individual discussion and plan for each major function.



56-1 Aust, Alden. "Now Registering on Campus: The Parking Meter."

College and pp. 26-28. University Business. Vol. 21, No. 5 (November 1956).

A discussion of the changes which have taken place on the campus with the coming of the automobile. Special reference is made to the University of Minnesota.

56-2 Bennett, Wells. "University Campus Parking." <u>Traffic Quarterly</u>. Vol. 10, No. 1 (January 1956). pp. 89-105.

The campus parking problem is discussed in general, with some specific examples: University of Michigan, University of Minnesota, and others.

- Brandstatter, A. F. "For Control of Student Driving, Try the Student Court." College and University Business. Vol. 20, No. 5 (May 1956). pp. 31-32.
- 'Parking-Service Areas." In <u>Planning Facilities for Health</u>,

 <u>Physical Education and Recreation</u>. The Athletic Institute, Inc.

 (1956). Chicago, Illinois. pp. 34, 119.
- Pearce, H. W. "Parking Lot Control." College and University Business. Vol. 20, No. 4 (April 1956). pp. 46-47.
- Riker, Harold C. <u>Land Use Requirements in Planning Functional</u>

 <u>College Housing</u>. Teachers College, Columbia University. (1956).

 New York, New York. pp. 88-89.
- 56-7 "University Campus Parking." <u>Traffic Quarterly</u>. Vol. 10, No. 1 (January 1956). pp. 89-105.

The campus parking problem is discussed in general with some specific examples: University of Michigan, University of Minnesota, and others.

56-8 "University of Cincinnati Garage." Parking. (National Parking Association). (Spring 1956). pp. 89-105.

This multipurpose parking structure is 680 feet by 125 feet with two elevated decks. The two lower floors furnish parking spaces for 584 cars, while the top deck has been made into a recreation area.

- 56-9 Sharpe, Thomas. "Oxford Roads." Town Planning Review. Vol. 27, No. 3 (October 1956). pp. 124-144.
- 56-10 U. S. Bureau of Public Roads. <u>Parking Guide for Cities</u>. U. S. Government Printing Office. (1956). Washington, D.C. 172 pp. 55¢.



The basic principles in this publication also apply to colleges and universities and their parking problems.

55-1 Wilbur Smith and Associates. <u>Traffic and Parking Plan for the Ohio State University</u>. (1955). New Haven, Connecticut.

The second secon

- 54-1 Fowler, Charles F. "Well Designed Parking Areas." <u>College and University Business</u>. Vol. 17, No. 6 (December 1954). pp. 24-27.
- Standards. 4th edition. John Wiley and Sons, Inc. (1952).

 New York, New York. pp. 484-485.
- 50-1 "Parking Spaces and Driveways." <u>Time-Saver Standards</u>. F. W. Dodge Corporation. (1950). New York, New York. 555 pp.
- 50-2 Hammond, Harold F. and Leslie J. Sorenson, eds. <u>Traffic Engineering Handbook</u>. Institute of Traffic Engineers. (1950). Washington, D.C. 285 pp.
- 46-1 American Automobile Association. <u>Parking Manual</u>: <u>How to Solve Community Parking Problems</u>. (1946). Washington, D.C. 181 pp.
- 41-1 Owen, Wilfred. "The Problem of Parking Facilities." <u>Public Roads</u>. Vol. 22, No. 5 (July 1941). pp. 103-112.



INSTITUTIONAL INDEX

	Name and Location	Code Number
1.	Akron, University of	70-4; 67-10
_	Akron, Ohio 44304	, , , , , ,
2.	Arapahoe Junior College Littleton, Colorado 80120	69-1
3.	Bakersfield, College at Bakersfield, California 93305	68-13
4.	Berkeley, University of California at Berkeley, California 94720	68-7
5.	Bowling Green, Ohio 43402	66-2
6.	Cambridge, University of Cambridge, England	65-4
7.	Case Western Reserve University	60-5; 57-1
_	Cleveland, Ohio 44106	0. 2, 2. <u>-</u>
8.	Chicago, Illinois 60637	68-4
9.	Cincinnati, University of Cincinnati, Ohio 45221	56-9
10.	City College, The New York, New York 10031	69-6
11.	Clark University Worcester, Massachusetts 01610	60-6
12.		63-4
13.		60-11
14.	Daytona Beach Junior College Daytona Beach, Florida 32015	66-3
15.	DePaul University Evanston, Illinois 60604	61-2
16.	Drexel University	60-12; 58-7
17.		66-4
18.	Durham, North Carolina 27706 Hawaii, University of (Manoa Campus)	
19.	Honolulu, Hawaii 96822 Herbert H. Lehman College	63-2
	Bronx, New York 10468	69-4
20.	Normal, Illinois 61761	67 - 6
21.	Urbana, Illinois 61801	67-5; 62-2; 62-3
22.	Indiana University Bloomington, Indiana 47401	68-5
23.	Iowa State College Ames, Iowa 50010	58-3
24.	# = # # ·	63-6
1 1		

23

25.	Kent State University	
26.	Kent, Ohio 44240 Los Angeles, University of California at	70-1
	Los Angeles, California 90024	68-3
27.	Maine, University of	08-3
0.0	Auburn, Maine 04473	60-1
28.	Malaya, University of	
29.	Pantai Valley, Kuala Lumpur, Malaysia Massachusetts, University of	68-6
-,•	Amherst, Massachusetts 01002	57. 6
30.	Mesa College	57 - 6
	Grand Junction, Colorado 81501	60-4
31.	Miami, University of	
20	Coral Gables, Florida 33124	67 – 3
32.	Michigan, University of	
	Ann Arbor, Michigan 48104	67-11; 66-5; 65-5;
33.	Minnesota, University of	56-3; 56-8
	Minneapolis, Minnesota 55455	67 1. 56 2. 56 2
34.	Mississippi, University of	67-1; 56-3; 56 - 8
	University, Mississippi 38677	63-5
35.	Monroe Community College	
26	Rochester, New York 14623	64-2
36.	Northwestern University	
37.	Evanston, Illinois 60201 Ohio State University	68-8; 59-1
5, .	Columbus, Ohio 43210	6. 6. 6
	301ambub, 01110 45210	61-3; 61-4; 61-5;
38.	Oklahoma Christian College	59-7
	Oklahoma City, Oklahoma 73111	57 - 2
39.	Oregon State University	3. 2
4.0	Corvallis, Oregon 97331	61-6; 61-11
40.	Pennsylvania, University of	
41.	Philadelphia, Pennsylvania 19104 Portland State University	64-6; 61-9; 58-7
🗸	Portland, Oregon 97207	67. 0
42.	Princeton University	67-8
	Princeton, New Jersey 08540	64-5
43.	Purdue University	
44.	Lafayette, Indiana 47907	69-2; 65-3
44.	Queens University Kingston, Ontario, Canada	
45.	Rhode Island College	70-7
	Providence, Rhode Island 02908	EO 0
46.	Rutgers University	59-2
	New Brunswick, New Jersey 08903	59-5
47.	San Diego, University of California at	3, 3
<i>1</i> . o	San Diego, California 92037	63-1
48.	San Francisco State College	
49.	San Francisco, California 94132 San Francisco, University of	68-9
•	San Francisco, California 94117	60.0
	, -u)¬¬111/	68-9



50.	San Mateo, College at	
	San Mateo, California 94402	58-2
51.	Santa Barbara, University of California at	
	Santa Barbara, California 93105	63-3
52.	Santa Cruz, University of California at	
	Santa Cruz, California 95060	63 - 7
53.	Southern Illinois University	
	Carbondale, Illinois 62901	65-1
54.	Teachers College, Columbia University	
	New York, New York 10027	60-2
55.	Texas A. & M. University	
	College Station, Texas 77843	60-3
56.	University Hospitals of Cincinnati	
	Cincinnati, Ohio 45221	60-5; 57-1
57.	Vanderbilt University	
	Nashville, Tennessee 37203	68-2
58.	Wayne State University	_
=-	Detroit, Michigan 48202	69 - 5
59.	Western Reserve University	•
C O	Cleveland, Ohio (see Case Western Reserve Univ.)	60-5; 57-1
60.	William Rainey Harper College	
	Palatine, Illinois 60067	67 - 4
οι.	Wisconsin, University of	
	Madison, Wisconsin 53706	69-3; 62-7

the comparison of parameters are the comparison of the comparison

Those institutions specifically mentioned in a title or title description are contained in this index. The code numbers following each listing (i.e. two digits, a dash, one digit) refer back to the body of the report and indicate the year of publication and alphabetical order of appearance within each year. In the body of the report these code numbers precede each bibliographic entry.

